

STATE OF MICHIGAN
DRAFT WORK PLAN FOR
WELLHEAD PROTECTION SET-ASIDE
GRANT YEAR 2021
FISCAL YEAR 2022

Background

40 CFR Part 35, State and Local Assistance, Subpart L Drinking Water State Revolving Funds were established to “. . . ensure that each State’s program is designed and operated in such a manner as to further the public health protection objectives of the Safe Drinking Water Act (SDWA). . .” (§35.3500). To achieve the objective of improved public health protection, §35.3535(e) allows a State to use up to 15 percent of its capitalization grant allotment to establish and implement Wellhead Protection Programs under section 1428 of the Safe Drinking Water Act, 1976 PA 399, as amended (Act 399).

Goal

Maintain and protect the quality of Michigan’s groundwater by implementing a comprehensive, multi-faceted Wellhead and Source Water Protection (SWP) Program.

Funds Requested

A table is attached that shows the **projected** balances remaining in the Wellhead Protection Set-Aside in the open grant years and the amount requested in the grant year 2021 application. Please note that these projected balances are estimates calculated from actual and projected expenditures. They do not reflect amounts that may or may not have been drawn on the grants yet by staff in the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Administration Division. Also, it is important to note that projected expenditures do not reflect any federal sequestrations or unknown state funding reductions that may occur.

From the 2021 grant, EGLE is requesting \$2,160,320 from the Wellhead Protection Set-Aside authorized under Section 1452(g)(2)(C) of the federal SDWA for Wellhead Protection work. This level is approximately eight (8) percent of the 2021 grant amount of \$27,004,000.

The amount requested will be used to support full-time equivalents (FTE) and related program work. Funds will be expended from the oldest open grant year first.

Full-Time Equivalents

In fiscal year (FY) 2022, approximately 14.7 FTEs in the Drinking Water and Environmental Health Division (DWEHD) will be supported with funding provided by the Wellhead Protection Set-Aside. This totals an approximate total cost of \$1,994,320. Specific activities that these FTEs perform are detailed below. This figure includes salary, fringe benefits, and travel costs incurred to perform work tasks and professional development. The figure does not include other

expenses such as supplies, materials, information technology, and telecommunications equipment and support.

Program Work

The FTEs funded by this Set-Aside are responsible for:

- Coordination with other departmental programs, state, and federal agencies, in the development and integration of drinking water protection strategies. In particular, Water Resources Division, Remediation and Redevelopment Division (RRD), and Department of Health and Human Services (DHHS) on lead, Manganese, Per- and Polyfluoroalkyl Substances (PFAS) and Harmful Algal Blooms (HAB). This coordinated approach benefits both the public water supplies and the public.
- Managing and maintaining Wellogic, Michigan's online water well data system.
- Provide training and oversight to Michigan Geological Survey in their work (contracted using State funds) to enter well construction records into Wellogic and update existing records in Wellogic. Continue ongoing process for quality control and quality assurance of information entered into Wellogic.
- Continuing and expanding the implementation of source water select cyanotoxin screening and source water assessment methodology for surface water sources. The Set-Aside funds will be utilized to provide technical assistance to supplies, including prompt assistance if any cyanotoxins are detected in the raw or finished tap during cyanotoxin (HAB) sampling efforts lead by the Emerging Contaminants Unit. Data will be reviewed as it becomes available with public health protection as the primary objective.
- Following cyanotoxin (HAB) sampling efforts, staff will participate in after action reviews, identifying successes, improvements, and lessons learned in an effort to continue to leverage resources outside the Set-Asides to support collection and laboratory analysis costs.
- Informing public water supplies about the SWP Matching Grant Program and it's benefits and providing assistance to communities in the development and implementation of wellhead and surface water intake protection plans.
- Administering the SWP Matching Grant Program. Implementing the recommendations from the LEAN Process Improvement effort completed regarding the grant process. These recommendations will improve efficiency and emphasize high impact activities. Develop a five-year plan for grant program growth.
- Updating Source Water Assessment Programs (SWA) for Community Water Supplies (CWS) and Noncommunity Water Supplies (NCWS). Providing education and outreach on wellhead protection, including providing delineations of wellhead protection areas to CWS and Nontransient, Noncommunity Water Supplies (NTNCWS).
- Reviewing and processing local health department (LHD) SWAs submitted by the LHDs. DWEHD technical staff will track the updating of the assessments and determine if the NTNCWSs qualify for substantial implementation of SWP activities.
- Technical staff will continue to develop an outreach strategy and materials for water systems identified as high risk in the SWA process. The strategy will include informing the system of why their system is rated as high risk, i.e., geologic setting, chemical results, lack of information, etc. and what steps they can take to protect their source water.

- Reviewing and approving traditional wellhead delineations submitted by Community Water Supplies.
- Provide geologic and hydrogeologic technical assistance to communities developing new water supplies in areas where the Water Withdrawal Assessment Tool indicates a limited supply of water available within the watershed.
- Attending ongoing training, tools, and trends in areas of groundwater protection and source evaluations, including new geographic information systems (GIS) technologies and in the field data collection applications.
- Registering well drillers and pump installers to ensure they are qualified to construct wells or install well equipment, according to Michigan's well construction code requirements. Ensuring wells are constructed to code, initiating enforcement for compliance, or revoking a registration from a well driller or pump installer when necessary. This is to ensure protection against the contamination of aquifers and to exclude contamination from wells.
- Collaborating on issues, training, and projects identified by members of the Director's Water Well Advisory Committee.
- Administering the Onsite Wastewater Management (OWM) Program, including evaluating each LHDs OWM Program for consistency and assurance that minimum program requirements are met. The evaluations include the review of LHD documentation for permitting of onsite wastewater systems which includes identifying any required isolation distances for drinking water supplies for the protection of public health.
- Oversight activities for higher density land developments including subdivisions, condominium projects and certain land divisions for suitability and protection of drinking water supplies. These activities include quality, quantity and protection of the onsite water supply systems and assuring site suitability for proper wastewater treatment and dispersal of sanitary sewage for the protection of public health.
- Development and implementation of a new division level database. This database will integrate the Environmental Health Programs, through shared access to information regarding SWP efforts with the Septage, OWM, Campground, and Public Water Supply Programs.
- Provide technical assistance, information, and regulatory perspectives to external stakeholders interested in establishing a uniform approach to sanitary wastewater statewide regulations inclusive of single and two-family residential systems.
- Education and application of risk-based criteria for performance and treatment based decentralized system siting and design.
- Evaluating and approving the use of new technologies for treatment of onsite wastewater.
- Work with the United States Environmental Protection Agency (U.S. EPA) on SepticSmart Week activities to provide outreach and encourage homeowners and communities to care for and maintain their septic systems to help protect drinking water sources.
- Collaborate with other EGLE divisions (Water Resources; Part 22 Groundwater Permits, Part 41 Wastewater Construction Permits, Surface Water Assessment) to align agency efforts for public health protection related to wastewater, drinking water systems and groundwater protection.
- Administering the Septage Waste Program, including the licensing of septage waste haulers and permitting of land application sites.
- Providing technical training and assistance to public water supplies, LHDs, well drillers, pump installers, onsite wastewater treatment industry professionals, and septage waste haulers.

- Providing clerical, managerial, and administrative support to the scientific and engineering staff performing the activities listed above.

Additional Program Activities

Wellogic Software Maintenance (\$50,000)

A total of \$30,000 from this Set-Aside will be spent to maintain Wellogic, the database that contains water well construction data in Michigan. Maintenance will include quarterly releases by the vendor to address any bugs reported during the calendar year. Wellogic's data is used by many State applications and regulatory activities (e.g., Drinking Water Geographic Information System, Water Withdrawal Assessment Tool, and WaterTrack). EGLE uses the Wellogic data for water withdrawal legislation; groundwater conflict resolution; statistical data; contamination investigations; well construction specifications; public water supply protection efforts; SWP activities; and well code compliance assessment. The data is also used by other state and federal agencies, local health departments, consultants, universities, well drilling supply houses, and other groups such as the Michigan Rural Water Association and the Michigan Ground Water Association. The Michigan Department of Health and Human Service's Environmental Health Surveillance Section recently began using Wellogic data to create awareness of environmental health concerns. This is part of their implementation of an Environmental Public Health Tracking Network under the Center for Disease Control's National Tracking Network System.

Wellogic Enhancements (\$100,000)

Enhance the Wellogic software to add new features that improve usability, functionality, and stability. Planned enhancements include: data entry notifications when contractors attempt to enter well records during a time when their registration is not current; updates to fields that should no longer be required; changes to business rules for some data entry fields; modernize the GIS portions of the application to take advantage of new technologies and capabilities; update reports that deal with financial and Michigan Cashiering and Receivable System (MiCaRS) data; update end user messages to be more generic for when user ID and password are entered incorrectly.

Well Construction (Part 127) Training for LHD Staff (\$6,000)

There is an ongoing need for training for new sanitarians and those sanitarians that have been in the profession for five plus years. Education and outreach for sanitarians will focus on topics such as permit deviations, drilling methods, disinfection, well record review, flowing well construction and final inspections. These trainings are critical to the understanding and applications of rules in the field and how they pertain to the well construction code across jurisdictions for protection of public health. To connect the rule requirements and understanding of the well drilling process, an in-person demo of a well being drilled is need for continued education of staff at health departments performing inspections if conditions for setting up the field training can be secured.

In addition, DWEHD identified the need for LHD training regarding understanding the roles of the DWEHD and RRD staff. Specifically, the management of sites in areas of groundwater contamination, the short and long-term monitoring of drinking water supplies, identifying groundwater restriction areas, and the permitting of water well drilling activities in these areas. The collaboration between RRD, DWEHD, and health department staff implementing the long-

term monitoring program is vital to the public health and furthers our understanding of the groundwater resource.

Grants to Support Local Implementation (\$0)

EGLE intends to utilize during this grant year, \$400,000 from the previous years' balance, available to award as SWP grants.

Under Act 399, EGLE has the authority to implement a SWP Matching Grant Program to enhance the voluntary State program. The grant program requires a 50/50 match of state and local funds which supports the development and implementation of groundwater and SWP Programs.

Total expenditures in the grant program from 1999 to current day amounts to 972 awards totaling \$12,262,304. The following is a 5-year history of grant commitments for program expenditures using funds provided by the Set-Aside:

- FY 2017 – 39 communities awarded \$371,758
- FY 2018 – 43 communities awarded \$362,446
- FY 2019 – 43 communities awarded \$472,513
- FY 2020 – 39 communities awarded \$406,964
- FY 2021 – No funding awarded

Grant awards for the FY 2021 cycle were halted due to Coronavirus Pandemic related resource uncertainties. However, this pause allowed the opportunity to implement program changes identified in a February 2020 LEAN Process Improvement evaluation. That process yielded many recommendations for increasing the impact of the program.

Grant program improvements for FY22 include utilization of a more in-depth application and guidance plan for communities; EGLE educational outreach to communities and consultants before the application deadline; and implementing a more robust outcome-based data collection process which will allow EGLE to better articulate the positive impacts of SWP programs.

Onsite Wastewater Management (OWM) Training for LHD Staff (\$10,000)

Many of the LHD staff who are implementing the OWM Program under contract with the state of Michigan continue to be new to the Program. There is a strong need for in-depth technical training for these staff on such subjects as: conducting an initial site evaluation, determining hydraulic loading capacity, design flow, characterizing the wastewater effluent to be treated, and identification of soil types. Training must also include identification of failing systems and the collection of information on the failed system such as system age, design, and site conditions. Education on aspects of existing statewide criteria and Administrative Rules, and potential legislation may also be required for LHD staff and others involved in the industry, dependent on movement of potential bills. There is also a desire to enhance our training capabilities by purchasing a number of United States Department of Agriculture Calibrated Soil Identification Kits (Kits). These Kits could be utilized for virtual or in person trainings for LHD staff led by the OWM Program on soils evaluation and identification.

Agency Responsibilities

The DWEHD administers wellhead protection activities, which includes ensuring that drinking water wells are constructed according to code; reviewing traditional wellhead delineations and providing provisional delineations to public water supplies; and providing grants to local governments to increase SWP efforts. Also included in this program is ensuring that onsite wastewater systems are designed and maintained properly to protect groundwater from contamination.

DWEHD program staff will administer the SWP Grant Program. Staff will review all grant applications and award grants based on a scoring system that awards points when the application meets certain criteria. Staff will review all grantee progress in meeting their grant commitments, review their work products, and approve all invoices received for payment.

FTE work quality and time spent on wellhead protection activities is overseen by DWEHD managerial staff. They approve staff time charges and all applicable charges to the Wellhead Protection Set-Aside. The DWEHD Administration Section staff process expenditures and track grant and Set-Aside balances. The financial data included in this work plan and in the activity reports are obtained from DWEHD Administration Section financial reports. Finally, EGLE Administration Division staff is responsible for requesting draws from the capitalization grants for the expenditures processed by the DWEHD Administration Section.

Schedule

This work plan covers the period from October 1, 2021, to September 30, 2022.

Evaluation Process

DWEHD staff will assess the work progress and work products with grant recipients and other contractors no less than every six months during the contract period. Final payment is dependent upon full completion of contract commitments.

At the beginning of each calendar year, DWEHD employees, under the direction of their supervisor, must create performance objectives. These objectives may correlate to tasks and special projects included in the Set-Aside work plans. Employees are expected to demonstrate progress in accomplishing the desired outcomes throughout the year. All DWEHD managers meet with their staff periodically to discuss available metrics, current workload, and what shifts, or task prioritization may be needed. State will inform the U.S. EPA of changes to the work described in the workplans.

Progress Reports

At the end of each fiscal year, the DWEHD will submit an activity report to the U.S. EPA listing activities and expenditures from the Wellhead Protection Set-Aside.

**Wellhead Protection Set-Aside
 Projected Expenditures and Balances Remaining
 Grant Years 2018-2021**

Grant Year	Grant Number	Date Awarded	Amount Awarded	Projected Amount to be Expended by September 30, 2021	Projected Balance Remaining on September 30, 2022
2018	975487-18	10/01/2018	\$1,363,300	\$1,363,300	\$0
2019	975487-19	10/01/2019	\$1,350,550	\$1,350,550	\$0
2020	975487-20	10/01/2020	\$2,702,900	\$2,702,900	\$0
2021	Pending	10/01/2021	\$2,160,320	\$1,410,320	\$750,000